

WHAT IS CLAIMED IS:

1. An image data output device receiving first image data representing a moving image and second image data representing an image including characters and graphics to output an image signal corresponding to a composite image generated by combining said first and second image data, comprising:

a first image data processing circuit scaling said first image data and thereafter weighting said scaled first image data;

a second image data processing circuit weighting said second image data and thereafter scaling said weighted second image data; and

a first combining circuit combining said first image data processed by said first image data processing circuit and said second image data processed by said second image data processing circuit.

2. The image data output device according to claim 1, wherein a weighting factor used by said first image data processing circuit is scaled according to resolution of an image display unit.

3. The image data output device according to claim 1, wherein said first image data processing circuit includes a first scaling circuit scaling said first image data and a weighting factor multiplier circuit weighting said first image data scaled by said first scaling circuit,

said second image data processing circuit includes a second combining circuit receiving said second image data for weighting at least one image data constituting said second image data and combining the weighted image data to generate one composite image data and

a second scaling circuit scaling the composite image data generated by said second combining circuit, and

said first combining circuit combines the image data supplied from said weighting factor multiplier circuit and the image data supplied from

15 said second scaling circuit.

7 4. The image data output device according to claim 3, wherein said second combining circuit weighting and then adding together a plurality of image data constituting said second image data for combining said plurality of image data. ?

5. The image data output device according to claim 3, wherein a weighting factor used by said weighting factor multiplier circuit is scaled according to resolution of an image display unit.

5 6. An image data output device receiving first image data representing a moving image and second image data representing an image including characters and graphics to output an image signal corresponding to a composite image generated by combining said first and second image data, said image signal being output to represent a plurality of data according to respective resolutions of a plurality of image display units, comprising:

Fig. 4
Fig. 5
31a/31b
a plurality of first scaling circuits scaling said first image data according to respective resolutions of said plurality of image display units;

10 a plurality of weighting factor multiplier circuits multiplying said first image data scaled by said plurality of first scaling circuits by respective weighting factors;

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a first combining circuit receiving said second image data for weighting at least one image data constituting said second image data and combining the weighted image data to generate one composite image data;

15 34a/34b
a second scaling circuit scaling the composite image data generated by said first combining circuit according to respective resolutions of said plurality of image display units; and

20 38a/38b
a plurality of second combining circuits combining image data supplied respectively from said plurality of weighting factor multiplier circuits and image data supplied from said second scaling circuit to generate and output composite image data according to respective resolutions of said

plurality of image display units.

7. The image data output device according to claim 6, further comprising a memory storing the image data scaled by said second scaling circuit.

8. The image data output device according to claim 6, wherein weighting factors used by said weighting factor multiplier circuits respectively are scaled according to respective resolutions of said image display units.

9. An image data output device outputting image data as a plurality of data according to respective resolutions of a plurality of image display units, comprising:

a plurality of ^{41/42}first weighting factor multiplier circuits respectively multiplying, by respective weighting factors, first image data to be output respectively for said plurality of image display units and representing a moving image; ₃₂

a second weighting factor multiplier circuit multiplying second image data representing an image including characters and graphics by a weighting factor;

a scaling circuit scaling the image data supplied from said second weighting factor multiplier circuit according to respective resolutions of said plurality of image display units; and

a plurality of ³⁸combining circuits combining image data supplied respectively from said plurality of first weighting factor multiplier circuits and image data supplied from said scaling circuit to generate and output composite image data according to respective resolutions of said plurality of image display units.

10. A receiving device comprising:

a tuner selectively receiving a signal transmitting first image data representing a moving image and second image data representing an image

including characters and graphics;

5 a separating unit separating the received signal into a signal corresponding to said first image data and a signal corresponding to said second image data;

a decoding unit reproducing said first and second image data from an output of said separating unit; and

10 an image data output device receiving said first and second image data from said decoding unit to output an image signal corresponding to a composite image generated by combining said first and second image data, said image data output device including

15 a first image data processing circuit scaling said first image data and thereafter weighting said scaled first image data,

112 2^d a second image data processing circuit weighting said second image data and thereafter scaling said multiplied second image data, and

112 A1B 20 a first combining circuit combining said first image data processed by said first image data processing circuit and said second image data processed by said second image data processing circuit.

11. The receiving device according to claim 10, wherein a weighting factor used by said first image data processing circuit is scaled according to resolution of an image display unit.

12. The receiving device according to claim 10, wherein said first image data processing circuit includes a first scaling circuit scaling said first image data and a weighting factor multiplier circuit weighting said first image data scaled by said first scaling circuit,

5 said second image data processing circuit includes a second combining circuit receiving said second image data for weighting at least one image data constituting said second image data and combining the weighted image data to generate one composite image data and

10 a second scaling circuit scaling the composite image data generated

by said second combining circuit, and

15 said first combining circuit combines the image data supplied from said weighting factor multiplier circuit and the image data supplied from said second scaling circuit.

9 13. The receiving device according to claim 12, wherein said second combining circuit weighting and then adding together a plurality of image data constituting said second image data for combining said plurality of image data.

4118 a^s 14. The receiving device according to claim 12, wherein a weighting factor used by said weighting factor multiplier circuit is scaled according to resolution of an image display unit.

15. A receiving device comprising:
a tuner selectively receiving a signal transmitting first image data representing a moving image and second image data representing an image including characters and graphics;

5 a separating unit separating the received signal into a signal corresponding to said first image data and a signal corresponding to said second image data;

a decoding unit reproducing said first and second image data from an output of said separating unit; and

10 an image data output device receiving said first and second image data from said decoding unit to output an image signal corresponding to a composite image generated by combining said first and second image data, (said image signal being output to represent a plurality of data according to respective resolutions of a plurality of image display units,)

15 said image data output device including
a plurality of ^{31a/b}first scaling circuits scaling said first image data according to respective resolutions of said plurality of image display units,
a plurality of ^{32a/b}weighting factor multiplier circuits multiplying said first image data scaled by said plurality of first scaling circuits by respective

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20 weighting factors³⁸

a first combining circuit receiving said second image data for weighting at least one image data constituting said second image data and combining the weighted image data to generate one composite image data,

25 ^{34h} a second scaling circuit scaling the composite image data generated by said first combining circuit according to respective resolutions of said plurality of image display units, and

30 a plurality of second combining circuits combining image data supplied respectively from said plurality of weighting factor multiplier circuits and image data supplied from said second scaling circuit to generate and output composite image data according to respective resolutions of said plurality of image display units.

16. The receiving device according to claim 15, wherein said image data output device further includes a memory storing the image data scaled by said second scaling circuit.

17. The receiving device according to claim 15, wherein weighting factors used by said weighting factor multiplier circuits respectively are scaled according to respective resolutions of said image display units.